INDEX OF SURGICAL PROGRESS.

GENERAL SURGERY.

I. **Sterilizer for Surgical Purposes.** By Dr. Straub (Utrecht, Holland). The author had used, in the pathological laboratory of the military hospital in Utrecht, for a long period of time, a very simple apparatus, viz., a pea-steamer which was used in the kitchen, for the purpose of desinfecting the cylinders in which the cotton is kept, nutritive soil for bacteriological experiments, etc. The water tank of the steamer was used for the disinfection of instruments. When he, later on, was ordered by the inspector of the sanitary service to report on the introduction of a sterilizer for use in the military hospitals and in the field, he thought of having the pea-steamer made on a larger scale and of stronger material. Especially one disadvantage had to be improved in the construction of these large apparatuses. The objects and instruments which were disinfected in the above mentioned apparatus were somewhat moist; being a result of the condensation of the small quantity of the steam which penetrated into it. This disadvantage had to be done away with. The apparatus consists of a cylinder shaped water-tank, which furnishes the steam and simultaneously sterilizes the instruments, and a cylinder covered with felt for the sterilization of dressing material, pus basins, towels, operating coats, etc. The *modus operandi* of this very excellent and inexpensive apparatus is extensively described in the original article.

The reliability of this sterilizer has been proven by numerous bacteriological experiments made with it by Straub in the pathological laboratory.

The apparatus is also much cheaper than other similar ones constructed for the same purpose, and if dressing material saturated with

antiseptics are rendered superfluous, then a considerable saving will result if this apparatus be used any length of time.

A half an hour is required for sterilization. The sterilization of instruments is to be practiced with care. The quality of the water may influence it and not all instruments bear the boiling process equally well. If the boiling of instruments is to become universal, then instruments with metallic handles will be generally used.

The sterilizer is to be had at the instrument maker Harting-Bank in Utrecht, Holland, for 36 gulden ($10).—*Nederltijdschr. voor Geneeskunde*, 25, 1889.

F. H. PRITCHARD (Boston).

OPERATIVE SURGERY.

I. New Method for Preventing Hæmorrhage During Amputations at the Hip-Joint. By DR. J. A. WYETH (New York). The limb having been elevated and an Esmarch bandage having been applied, two steel mattress needles, three sixteenths of an inch in diameter and a foot long, are used. The point of one is inserted an inch and a half below the anterior superior spine of the ilium and slightly to the inner side of this prominence, and is made to traverse the muscles and deep fascia, passing about half way between the great trochanter and the iliac spine, external to the neck of the femur and through the substance of the tensor vaginæ femoris, coming out just back of the trochanter. About four inches of the needle should be concealed by the tissues.

The point of the second needle is entered an inch below the level of the crotch internally to the saphenous opening, and, passing through the adductors, comes out about an inch and a half in front of the *tuber-ischii*. No vessels are endangered by these needles. The points are protected by corks to prevent injury to the operator's hands.

A piece of strong white rubber tube half an inch in diameter, and long enough when tightened in position to go five or six times around the thigh, is now wound very tight around and above the fixation needles and tied.

The Esmarch bandage is removed and five inches below the tourniquet a circular incision is made, and a cuff which includes the subcutaneous tissues down to the deep fascia is dissected off to the level of the lesser trochanter, at which level the muscles and vessels are divided squarely and the bone sawed through. All vessels (including the veins) which can be seen are tied with catgut and the smaller bleeding points can be discovered by slightly loosening the tourniquet.

The remaining portion of the femur is now easily removed by dividing the attached muscles close to the bone and opening the capsule as soon as it is reached. On lifting the end of the bone in the direction of the patient's navel and dividing the cotyloid ligament posteriorly, the air enters the cavity of the acetabulum and greatly facilitates the division of the ligamentum teres.

GYNÆCOLOGICAL.

I. Three Cases of Prolapsus Urethræ Feminalis. By A. SODERMARK (Boras, Sweden). The writer wonders at seeing this disease spoken of as of rare occurrence. He has seen 3 cases in 3 years. The symptoms produced by this are not unimportant. As to the treatment he prefers removal with the knife or scissors with subsequent suturing of the parts by the ligature or touching with the galvano-cautery.

1. A woman, æt. 58 years, with prolapsus uteri, cystocele and rectocele as complications. At the meatus urinarius there was a tumor the size of a walnut and partially gangrenous, in the middle of which an opening led into the urethra. Extirpation was done by means of the galvano-caustic loop. Later colporrhaphia duplex was performed. Discharged as cured.

2. A woman, æt. 70 years, had noticed at the external urethral opening a tumor the size of a plum, formed by the mucous membrane of the urethra. Removal by means of the galvano-cautery. Recovery.

3. A girl, æt. 9 years. At the external urethral opening there was a tumor formed by prolapse of the urethral mucous membrane. This tumor about the size of an almond. Removal by means of the scis-

sors; sutures were inserted. Recovery.- *Hygeia*, 1889, Bd. LI., No. 5, pp. 306–307.

II. Complete Prolapse of the Uterus in a New-Born Child. By N. GUISLING. The writer describes a child, born with spina bifida and bilateral clubfoot, which soon after birth was taken with diarrhœa and with incessant straining. A complete prolapse of the uterus, projecting 3 cm. from the vulva, developed, the child perishing in a few days. A post mortem examination was made which revealed nothing abnormal in the pelvis except a laxness of the ligamenta lata and rotunda. The prolapse was probably caused by the abdominal pressure. —*Norsk Magazin for Tægevideuskaben*, 1889, 4.

III. Carcinoma Uteri Prolapsi. By E. ULLMANN (Vienna). Cases of cancerous degeneration of prolapsed uteri are of extreme rarity; only three have been already described in the literature. The writer describes a fourth case – that of a woman, æt. 81 years—in his communication. The total prolapse had existed nearly 20 years; during the latter months an epithelioma developed in the middle of the prolapsed uterus, which gave much annoyance by hæmorrhage and pains. Total extirpation of the uterus was done, which was followed by recovery.— *Wiener Medicin Presse*, 1889, Bd. xxx, No. 50

IV. On Total Extirpation of the Uterus through the Perineum. By FROMMEL. Basing his operation upon the attempts of Zuckerkandl to expose the pelvic organs through the perineum, by experiments upon the cadaver, the writer extirpated the uterus in a case of an extensive tumor of the cervix, extending also over onto the vaginal fornix. He made an incision uniting the two tubera ischii and then proceeding carefully upwards between the vagina and rectum until the space of Douglas is reached, from where he removed the uterus, then easily in view. This method is to be preferred in many cases of new growths, to the methods of operation in use up to now.— *Mnchuer Medicin Wochenschr*, 1889, No. 31.

V. Total Vaginal Extirpation of the Uterus for Retention of a Putrifying Placenta. By L. ROOSENBURG. The patient

in question was a woman, æt. 24 years, who had given birth to 2 fully developed children and then aborted at the sixth month. The midwife attempted to remove the placenta, but it presented some difficulties. In spite of the hæmorrhages which later on made their appearance, the uterus was curetted. March 24, abortion again occurred, at the fourth month. On the midwife attempting to remove the placenta the umbilical cord was torn off and the placenta remained in the uterus. Immediately after the labor the patient was seized with a chill which was followed by a feverish state. As these attacks repeated themselves daily and became more and more violent, the lochia but slightly bloody became putrid and the patient perceptibly emaciated. Roosenburg was called in March 30.

He found the patient in bed with a somewhat hippocratic face. Pulse very small (120), the abdomen more or less distended, the uterus to be felt below the umbilicus through the abdominal wall; the genitals covered with a black and putrid blood. The next day the patient was received into the hospital. Temperature 41.5°. Pulse 10. Respiration 40. The patient suffered from dyspnœa.

After disinfection of the vagina and uterine cavity, Roosenburg tried to gain entrance into the uterus. The mouth of the uterus, surrounded by a thick and but little elastic wall, only allowed two fingers to be introduced with difficulty. Nothing of the placenta however could be felt. Fearing a rupture of the cervix from further attempts, nothing further was done in this direction. Energetic disinfection and a tamponade of iodoform gauze.

During the night the temperature fell to 37°C; (the pulse remaining 124) to rise in the morning to 40°C. Pulse 132. Respiration 44. The next morning the tampon was removed. The mouth of the uterus not having dilated, an attempt was made to remove the placenta by means of Volkmann's curette (large size).

Disinfection again and tamponade. With rigors the temperature ran up to 40 5 Pulse 145. The next morning the abdomen was greatly distended; nausea. As the writer got the idea that the patient could not live 24 hours longer total extirpation of the uterus through the vagina was performed with the patient's consent. After removal of

the uterus iodoform gauze was introduced into the lower part of the abdominal cavity and a large tampon of cotton dipped into iodoformized glycerine was placed into the vagina. The operation lasted an hour. Hot cognac was administered. The temperature remained 41.9° 2 hours after the operation, but in the evening it fell to 37.5°. Pulse 112. The pulse soon fell to 92 while the temperature remained normal; the ligatures came out after 10 days and after 14 days the patient could walk around the room. Immediately after the operation the uterus was examined. At the first incision over the posterior surface of the uterus through the peritoneum and half through the thickness of the uterine wall a very intense stench was remarked, while a second incision carried the knife into the uterine cavity through the placenta's middle. The placenta, very strongly adherent to the uterine wall, was upon its free surface black and stunk horribly. In some places a placentitis was to be observed.

In the literature only one such case is known, where SCHULTZE performed supravaginal extirpation. The writer in such cases would always perform the operation through the vagina. Besides that R. is of the opinion that in cases of puerperal septicæmia where the first disinfection of the uterus is without result, where the diagnosis becomes certain through an incipient peritonitis and the relation between pulse and temperature permits one to give a gloomy prognosis, total extirpation should be performed as a last resort.—*Nederl. Gijdschr. v. Geneeskunde*, 1889, No. 21.

VI. Total Vaginal Extirpation of Uterus, Together with Portions of Pelvic Connective Tissue. By DR. PAWLIK (Prague). Proceeding from the fact that the recurrences after operation upon carcinomatous uteri appear most frequently in the connective tissue of the parametria and extension of the carcinoma into this tissue too often renders the operations futile, Pawlik determined to remove the parametria with the uterus. He sounded the ureters in order to avoid injuring them. This procedure he has tried upon three patients.

I. The first case was that of a midwife, æt 48 years, with an ulcer-

ating carcinoma of the portio which on the left side had extended over on to the vaginal wall for one centimeter. There was painful infiltration of the left parametrium which, however, did not extend up to the pelvic wall. The left ureter could be separated. An operation was performed October 18, 1888, with a sound in the left ureter and a rubber tube to carry the urine off into a receptacle.

The uterus and the left parametrium, close up to the lateral pelvic wall, as well as the left cystic ovary, were extirpated. Recovery uneventful. No recurrence up to one half year later.

II. A cauliflower growth of the portio; the vaginal insertion of the uterus free from any infiltration. From the right border of the cervix, a band, the size of one's little finger, ran up to the sacro-iliac articulation. The uterus and this band were extirpated without any sound in the ureter, as the ureter was thought to be out of danger. Recovery took place. The 28th day after the operation, after removal of the last ligature, the urine dribbled out of the right ureter, which had undoubtedly been caught in a ligature. The uretero-vaginal fistula closed closed spontaneously.

III. A large infiltrated ulcerated carcinoma of the portio, and in the left parametrium, a band the size of a finger, and running to the lateral pelvic wall. On the right side a similar but much smaller band was felt. An operation, May 24, 1889, was performed. Both ureters were sounded. The uterus and the band of the left side were removed, the band as near to the pelvic wall as possible. After removal of this band the other diappeared; it was clearly only an expression of the tension of the left. The course of the recovery was uneventful.—*Casopis Ceskych Lekaru*, 1889, No. 28.

F. H. PRITCHARD (Boston).

VII. A Contribution to the Treatment of Large Uterine Myomata Undergoing Expulsion. By PROFESSOR FEHLING (Basle). The frequently unfavorable termination following operating upon submucous myomata from the vagina (14–25% mortality) and the bad results after such procedures led Fehling to remove the tumor in three such cases where the tumors were in the process of

expulsion, not by the vagina but by laparotomy. These interesting cases are here given in an abstracted form.

The first case was that of a woman, æt.49 years, who had remarked in the course of the last few years the development of an abdominal tumor, which finally increased rapidly in size. Reduced greatly by hæmorrhages, and finally by fever, the patient sought medical aid. A tumor was found extending nearly up to the thoracic wall, which at the same time filled out the pelvis and had also extended down to the entrance of the vagina. No portio could be found, the os uteri only to be felt anteriorly behind the symphysis as a narrow seam of mucous membrane. Fever was also present in consequence of septic endometritis.

Laparotomy was performed. After opening the abdomen and separating the omental adhesions, the tumor was brought forward, the ovaries ligated, the bladder separated and the uterus constricted by the elastic ligature. Then an incision was made into the antĕrior wall of the uterus and the soft myoma situated under the mucous membrane separated from the surrounding tissues and completely enucleated. The lower piece reaching down into the pelvis passed well throngh the elastic ligature, then another ligature was applied, the uterus amputated, the stump being cared for according to Hegar. The pedicle was treated extra-peritoneally. Recovery.

In the second case the tumor in question was a sub-mucous myoma, the process of expulsion was of long duration, the deepest portion projected from the vagina and showed incipient necrosis. This patient also was so reduced by continuous hæmorrhage and septic endometritis that the danger forced an operation. This resembled entirely that of the first case and the condition revealed itself to be two separate myomata which were both enucleated and removed. One of these was suppurating, its removal being effected through the vagina. The stump treated as above. Recovery.

The tumor in the second case had also developed rapidly, leading to much hæmorrhage and also was partly protruding into the vagina. Phenomena of pressure and septic peritonitis indicated a speedy removal. The operation was performed as in the first cases; here also

the bladder had to be separated manually before applying the elastic ligature, and the entire tumor, together with that portion in the vagina, was removed through the uterine wound. Besides the tumor there was found here a circumscript pyosalpinx of the right Fallopian tube.

During the days immediately following the operation the temperature still remained high; the further course of the case was a favorable one.—*Cor. Bl. f. Schweizer Aertze*, xix, 21, 1889.